

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-31 (canceled).

Claim 32 (currently amended): A cross current control system for multiple, parallel-coupled power converters, the cross current control system comprising:

common mode chokes, each coupled to a respective power converter ;

local cross current detectors, each configured for obtaining a common mode cross current from a respective output line of a respective power converter;

local cross current feedback controllers, each configured for receiving the common mode cross currents from respective local cross current detectors, calculating a resultant cross current, and generating a local feedback control signal;

a global feedforward controller configured for detecting switching patterns of the power converters and generating counter balance zero-sequence global feedforward control signals;

a global cross current feedback controller configured for receiving the common mode cross currents from the local cross current detectors, calculating a resulting global cross current, and generating global feedback control signals; and

local converter controllers, each is configured for using a respective local feedback control signal, a respective global feedback control signal and a respective global feedforward control signal, to drive the respective power converter in accordance with an interleaved switching pattern with respect to the other power converters.

~~The system of claim 31 wherein the common mode choke comprises an AC link choke.~~

Claim 33 (original):     The system of claim 32, wherein the AC link choke comprises an integrated magnetic choke.

Claim 34 (original):     The system of claim 33, wherein the integrated magnetic choke comprises an integrating

Claim 43 (original): An integral choke assembly comprising:  
a common mode choke comprising a common mode core wound with at least two common mode coils; and

a differential mode choke comprising a differential mode core wound with at least one differential mode coil,

wherein the common and differential mode choke cores are configured so that at least one magnetic flux path is shared by magnetic flux generated by common mode coils and differential mode coils.

Claim 44 (original): The assembly of claim 43 wherein the common mode coils and differential mode coils are connected in series.

Claim 45 (original): The assembly of claim 43, wherein the common mode core comprises a higher permeability material than the differential mode core.

Claim 46 (original): The assembly of claim 43, wherein the common mode core comprises a closed rectangular core wound with three common mode coils, one for each phase, and wherein the differential mode core comprises an E core wound with a respective differential mode coil on each leg, the legs of the E core facing the closed rectangular core and sharing a part of magnetic flux path of the closed rectangular core.

Claim 47 (original): The assembly of claim 46, wherein the respective phases of the common mode coils and differential mode coils are connected in series.

Claim 48 (original): The assembly of claim 43, wherein the common mode core comprises a top closed rectangular core wound with three common mode top coils and a bottom closed rectangular core wound with three common mode bottom coils, and wherein the differential mode core comprises three posts with a respective differential mode coil wound on each post, the posts being arranged between the top and bottom closed rectangular cores and sharing a part of top and bottom rectangular magnetic flux paths.

Claim 49 (original): The assembly of claim 43, wherein the common mode core comprises a closed rectangular core wound with two common mode coils, and wherein the differential mode core comprises a U core wound with two differential mode coils on each leg, the legs of the U core facing the closed rectangular core and sharing a part of magnetic flux path of the closed rectangular core.

Claim 50 (original): The assembly of claim 43, wherein the common mode core comprises a top closed

rectangular core wound with one common mode top coil and a bottom closed rectangular core wound with one common mode bottom coil, and wherein the differential mode core comprises two posts with a differential mode coil on each post, the two posts arranged between the top and bottom closed rectangular cores and sharing a part of top and bottom rectangular magnetic flux paths.

Claim 51 (original): An integral choke assembly comprising:

a three phase common mode choke comprising a common mode core, wherein the common mode core comprises closed rectangular core wound with three common mode coils, one for each phase; and

a three phase differential mode choke comprising a differential mode core, wherein the differential mode core comprises an E core wound with a respective differential mode coil on each leg, the legs of the E core facing the closed rectangular core and sharing a part of magnetic flux path of the closed rectangular core.

Claim 52 (original): The assembly of claim 51, wherein the respective phases of the common mode coils and differential mode coils are connected in series.

Claim 53 (original): An integral choke assembly comprising:

a three phase common mode choke comprising a common mode core, wherein the common mode core comprises a top closed rectangular core wound with three common mode top coils and a bottom closed rectangular core wound with three common mode bottom coils; and

a three phase differential mode choke comprising a differential mode core, wherein the differential mode core comprises three posts, with a respective differential mode coil on each post, the three posts arranged between the top and bottom closed rectangular cores and sharing a part of top and bottom rectangular magnetic flux paths.

Claim 54 (original): The assembly of claim 53, wherein the respective phases of the common mode coils and differential mode coils are connected in series.

Claim 55 (original): An integral choke assembly comprising:

a single phase common mode choke comprising a common mode core, wherein the common mode core comprises a closed rectangular core wound with two common mode coils; and

a single phase differential mode choke comprising a differential mode core, wherein the differential mode core comprises a U core wound with two differential mode coils on each leg, the legs of the U core facing the closed rectangular core and sharing a part of magnetic flux path of the closed rectangular core.

Claim 56 (original): The assembly of claim 55, wherein the single phase common mode and differential mode chokes are connected in series.

Claim 57 (original): An integral choke assembly comprising:  
a single phase common mode choke comprising a common mode core, wherein the common mode core comprises a top closed rectangular core wound with one common mode top coil and a bottom closed rectangular core wound with one common mode bottom coil; and

a single phase differential mode choke comprising a differential mode core, wherein the differential mode core comprises two posts with a differential mode coil on each post, the two posts arranged between the top and bottom closed rectangular cores and sharing a part of top and bottom rectangular magnetic flux paths.

Claim 58 (original): The assembly of claim 57, wherein the single phase common mode and differential mode chokes are connected in series.

Claim 59-67 (canceled).